SCHOOL OF CIVIL ENGINEERING



JOINT HIGHWAY RESEARCH PROJECT

JHRP-76-20

TRAFFIC SPEED REPORT NO. 96

A. A. Gadallah

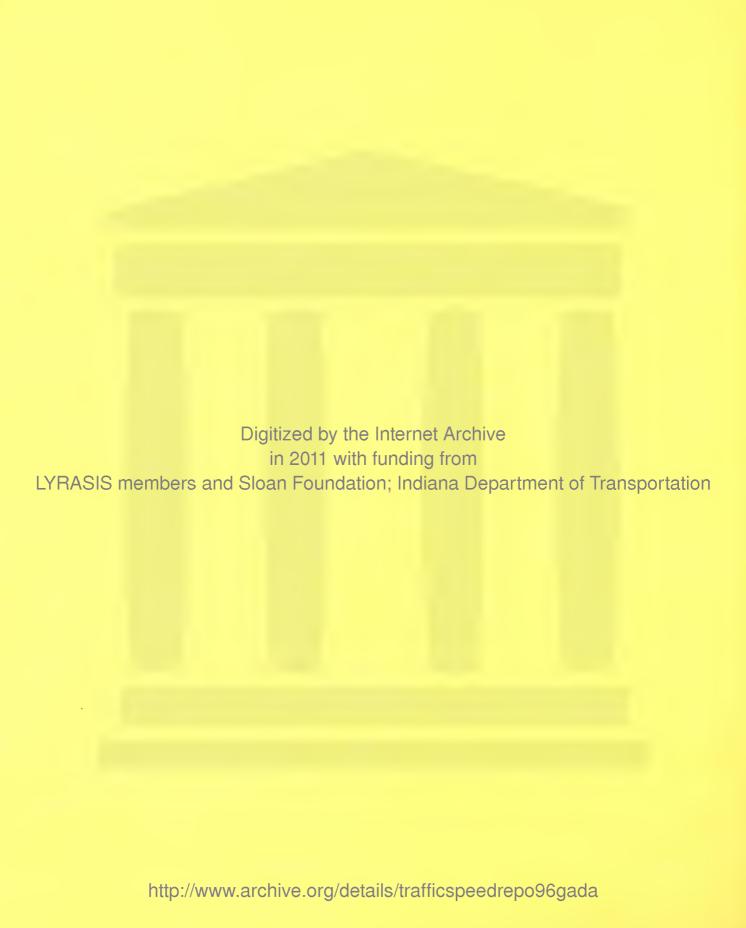
G. K. Stafford





INDIANA STATE

PURDUE UNIVERSITY HIGHWAY COMMISSION



TRAFFIC SPEED REPORT NO. 96

TO: J. F. McLaughlin, Director

June 23, 1976 Joint Highway Research Project

File: 8-3-3

H. L. Michael, Associate Director

Joint Highway Research Project Project: C-36-10C

The attached Progress Report No. 96 on Traffic Speeds is the report of the January-March quarterly study of free-flowing automobile and truck speeds on rural, tangent, level sections of Interstate, 4-lane and 2-lane and on urban interstate highways in Indiana. The report has been prepared by Mr. A. A. Gadallah, a Graduate Instructor in Research on our staff, under the direction of Professor H. L. Michael. The data were collected by Mr. G. K. Stafford and a number of graduate assistants on our staff.

The results indicate a decrease of about 0.6 mph in the average speed of all passenger cars and heavy trucks to that of the October-December 1975 Study. This decrease occurred largely on 2-lane roads with a slight increase measured on rural interstate highways.

Copies of the report will be sent to the Federal Highway Administration and the ISHC for review, comment and acceptance as fulfillment of the objectives of this HPR Part I Study. Copies of the report are requested for release to the Indiana State Police, the Indiana Traffic Safety Council and the Indiana Office of Traffic Safety as a normal procedure for these reports.

Respectfully submitted,

Thursday Murtael

Harold L. Michael Associate Director

HLM/ss

D. E. Hancher

cc: W. L. Dolch M. L. Hayes C. F. Scholer R. L. Eskew K. R. Hoover M. B. Scott K. C. Sinha L. E. Wood G. A. Leonards G. D. Gibson W. H. Goetz C. W. Lovell M. J. Gutzwiller R. D. Miles E. J. Yoder G. K. Hallock P. L. Owens G. T. Satterly S. R. Yoder



		TECHNICAL DEPORT OF THE PARTY O
1. Report No.	7. Government Accession No.	TECHNICAL REPORT STANDARD TITLE PAG 3. Recipient's Catalog No.
JHRP-76-20		
4. Title and Subtitle		5. Report Date
		June 1976
TRAFFIC SPEED REPORT	NO. 96	6. Performing Organization Code
7 Author(s)		8. Performing Organization Report No.
A. A. Gadallah and G.	K. Stafford	JHRP-76-20
9. Performing Organization Name and Addre		10. Work Unit No.
Joint Highway Research Civil Engineering Bui		11. Contract or Great No.
Purdue University	raring	HPR-1(13) Part I
West Lafayette, India	na 47907	13 Type of Report and Period Covered
12. Sponsoring Agency Name and Address		Interim Report
Indiana State Highway	Commission	JanMar. 1976
State Office Building		
100 North Senate Aven	14. Sponsoring Agency Code	
Indianapolis, Indiana	46204	
Conducted in cooperat: Federal Highway Admin: for Indiana Highways"	ion with the U.S. Dept. istration. Planning St	of Transportation, udy titled "Speed Trends
vehicles on Indiana Hitaken on interstate, in the state during the management of the specific the state during the management of the specific the specific that we have all average speeds all vehicles, passenged the state of the specific that the specific that the specific that the state of the specific that the specific that the state of the specific that the specific	ther on the continuing a ghways. Observations of four-lane and two-lane and two-lane and the continuing and the control of the overall average as 57.3 mph and 55.6 mph are 0.6 mph, 0.5 mph are cars, and all trucks collected in October-Noverall	of spot speeds were highways throughout March 1976. average speed for all speed for passenger h, respectively. These and 0.7 mph less for respectively, as

17. Key Words		18. Distribution Statement			
Speeds, Highway Speeds, Rural Highway Speeds, Speed Trends, 55 mph Speed Effect		No restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.			is
19. Security Classif. (of this report)	20. Security Class	of, (of this page)	21- No. of Pages	22. Price	
Unclassified	Unclassi	fied			



Progress Report

TRAFFIC SPEED REPORT NO. 96

by

A. A. Gadallah Graduate Instructor in Research

and

George K. Stafford Traffic Engineering Technician

Joint Highway Research Project

File No.: 3-3-3

Project No.: C-36-10C

Prepared as Part of an Investigation

Conducted by

Joint Highway Research Project Engineering Experiment Station Purdue University

in cooperation with the

Indiana State Highway Commission

and the

U. S. Department of Transportation Federal Highway Administration

The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the Federal Highway Administration.

Purdue University
West Lafayette, Indiana
June 23, 1976



TRAFFIC SPEED REPORT NO. 96

This report is an analysis of spot speed observations made during February and March 1976. All observations were made of free-flowing vehicles on level, tangent sections of rural and urban highways during daylight and under favorable conditions. Seven stations were studied from the same locations on selected Federal and State highways as used in the previous annual studies.

Stations were classified as two-lane, four-lane, rural interstate, or urban interstate highways. A representative sample of spot speeds was obtained at each station in each classification. The site locations were as follows: (See Figure A)

			Rural	Interstate Highways
*1.	I-69		.3 miles s	outh of Junction of SR 18
*2.	I-65		.0 miles w	est of Junction of SR 334
3.	I-74		.0 miles e	ast of Junction of Post Road
4.	I - 65		.5 miles n	orth of Junction of SR 160
			Four	Lane Highways
5.	U.S.	31	.2 miles s	outh of Junction of SR 38
*6.	U.S.	30	.0 miles e	ast of Junction of SR 49
7.	U.S.	41	.0 miles no	orth of South Junction of SR 2
*8.	U.S.	52	.0 miles we	est of Klondike
			Two L	ane Highways
* 9.	U.S.	35	.5 miles e	ast of Junction of I-69
10.	S.R.	43	.0 miles s	outh of Chalmers
11.	U.S.	231	.0 mile so	uth of Junction of SR 234
*12.	S.R.	25	.7 miles we	est of Americus
			Urban	Interstate Highways
13.	I - 94		ear Burr	
*14.	I-65		ast of Whi	te River

^{*}Stations used in this study.



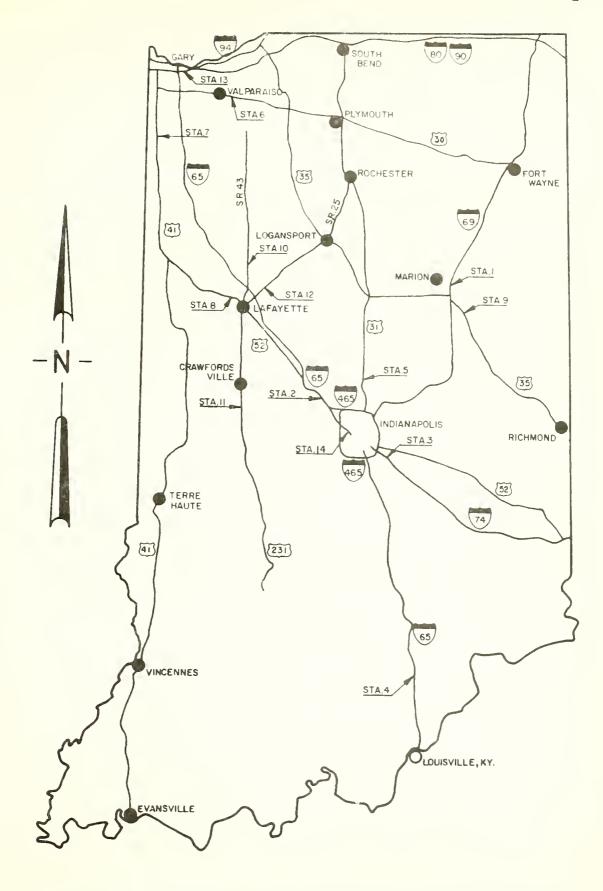


FIGURE A LOCATIONS OF SPEED-STUDY STATIONS



The vehicles were classified as Indiana or Non-Indiana

Passenger Cars and Light (less than 5000 lbs. gross weight)

or Heavy (equal to or more than 5000 lbs. gross weight) Trucks.

The analysis was performed as classified and combined, passenger cars or trucks.

The maximum speed limit in Indiana is 55 miles per hour, both on Interstate and other rural highways.

Equipment and Field Procedure

The observations for this study were obtained by use of an "Electromatic" Radar Speed Meter. The meter was placed approximately four feet from the edge of the pavement at angles less than 10° with the highway center line. No corrections of speeds were necessary at these small angles. At the beginning of the study the accuracy of the meter was checked and any constant discrepancy of readings was corrected accordingly.

RESULTS OF ANALYSIS

The data collected were analyzed and are summarized in Tables 1 to 7 in the Appendix. Tables 8, 9 and 10 summarize the data for rural interstate, four lane and two lane highways, respectively. Table 11 is the summary for all highways.

Tables 12 through 19 are summaries in an FHWA format which is desired. The average speed for each classification of vehicles on each type of highway for this study was as follows:



			Other	
	Intersta	te	Four Lane	Two Lane
	Urban	Rural	Rural	Rural
Passenger Cars:				
Indiana	57.2	57.4	57.7	56.4
Non-Indiana	57.5	58.0	58.6	55.9
All Passenger Cars	57.2	5 7. 5	57.8	56.4
85 Percentile (all)	61.0	61.8	62.2	60.5
Trucks:				
Less than 5000 lbs.	57.0	56.5	57.0	55.2
5000 lbs. or more	54.4	56.7	54.9	5 3.4
All Vehicles:				
Average	56.9	57.3	57.4	55.8
85 Percentile	60.6	61.5	61.9	59.9

The percent of vehicles exceeding the speed limit (55 mph) for each classification of vehicle and each type of highway was as follows:

	Intersta	te	Other	
	Urban	Rural	Four Lane	Two Lane
Passenger Cars:				
Indiana	67.0	66.5	68.3	56.2
Non-Indiana	61.3	71.7	78.4	50.0
All Passenger Cars	66.5	67.9	69.7	55.6
Trucks:				
Less than 5000 lbs.	68.6	54.6	61.0	45.4
5000 lbs. or more	55.8	53.4	49.5	44.0
All Vehicles:	65.4	64.6	66.3	51.4



The percent of vehicles traveling more than 5 mph above the speed limit (exceeding 60 mph) for each case was as follows:

			Other		
	Inters	state	Four Lane	Two Lane	
	Urban	Rural	Rural	Rural	
Passenger Cars:					
Indiana	19.9	23.1	29.0	16.5	
Non-Indiana	22.6	25.6	34.0	14.8	
All Passenger Cars	20.1	23.8	29.7	16.4	
Trucks:					
Less than 5000 lbs.	17.2	17.6	27.6	13.8	
5000 lbs. or more	3.9	23.3	11.9	6.0	
All Vehicles:	18.0	22.9	27.4	14.8	

The percent of vehicles traveling more than 10 miles per hour above the speed limit (exceeding 65 mph) for each case was as follow:

			Other	
	Inters	Interstate		Two Lane
	Urban	Rural	Rural	Rural
Passenger Cars:				
Indiana	2.9	5.0	6.9	4.9
Non-Indiana	0.0	5.6	4.1	1.9
All Passenger Cars	2.7	5.1	6.5	4.6
Trucks:				
Less than 5000 lbs.	5.7	2.8	10.6	2.6
5000 lbs. or more	0.0	4.9	2.0	1.0
All Vehicles:	2.6	4.8	6.5	3.9



Summary and Conclusions

The overall average speed for all vehicles and passenger cars in this study was found to be 56.8 mph and 57.3 mph, respectively. The overall average speeds for heavy trucks and for all trucks were found to be 54.9 mph and 55.6 mph, respectively. These overall average speeds are 0.6 mph, 0.5 mph, and 0.7 mph less for all vehicles, passenger cars, and all trucks, respectively, than the results of October-November 1975.

Table A presents a comparison of the overall speed results with that of the previous two studies. The 85th percentile speed of passenger cars was about the same as that of the October-November 1975 study on all highways, and decreased 1.9 mph from the July-September 1975 annual speed study to 61.5 mph.

A comparison of February-March 1976 speed data with that for other recent periods for several types of highway for passenger cars and trucks is shown in Tables B, C and D. The data for the May-June 1975, October-November 1975 and February-March 1976 periods are for only a portion of the stations.

The reduction in the average speeds and 85th percentile speeds occurred mainly on two-lane highways (as compared to the October-November 1975 study). On the other four-lane highways a slight decrease occurred for the average speeds and the 85th percentile speeds. However, a slight increase occurred for the average speeds and the 85th percentile speeds on interstate highways.

•			

TABLE A

COMPARISON OF THE OVERALL SPEED RESULTS

	FebMarch 1976	OctNov. 1975	July-Sept.
Average:			
All Passenger Cars	57.3	57.8	58.7
Heavy Trucks	54.9	56.3	57.4
All Trucks	55.6	56.3	57.4
85 Percentile:			
All Passenger Cars	61.5	61.8	63.4
Heavy Trucks	59.5	60.5	62.5
All Trucks	60.2	60.7	62.5
15 Percentile:			
Heavy Trucks	49.3	51.2	51.5



TABLE B

AVERAGE SPEEDS ON INTERSTATE HIGHWAYS (RURAL)

	FebMarch 1976	OctNov. 1975	July-Sept. 1975	May-June 1975
Passenger Cars:				
Indiana	57.4	56.8	59.7	57.4
Non-Indiana	58.0	57.1	60.2	57.4
All Passenger Cars	57.5	56.9	59.9	57.4
85 Percentile (all)	61.8	60.4	64.2	60.9
Trucks:				
Less than 5000 lbs.	56.5	55.9	58.2	56.6
5000 lbs. or more	56.7	56.5	59.3	56.7

TABLE C

AVERAGE SPEEDS ON OTHER FOUR-LANE HIGHWAYS

FebMarch 1976	OctNov. 1975	July-Sept. 1975	May-June 1975
5 7. 7	58.2	57.6	58.6
58.6	58.7	58.1	58.4
57.8	58.3	57.7	58.6
62.2	62.3	62.0	63.3
57.0	56.0	56.4	56.9
54.9	55.7	55.9	55.4
	57.7 58.6 57.8 62.2	1976 1975 57.7 58.2 58.6 58.7 57.8 58.3 62.2 62.3 57.0 56.0	1976 1975 1975 57.7 58.2 57.6 58.6 58.7 58.1 57.8 58.3 57.7 62.2 62.3 62.0 57.0 56.0 56.4

TABLE D
AVERAGE SPEEDS ON TWO-LANE HIGHWAYS

	FebMarch	OctNov. 1975	July-Sept. 1975	May-June 1975
Passenger Cars:				
Indiana	56.4	57.5	57.2	57.1
Non-Indiana	55.9	57.1	57.4	57.7
All Passenger Cars	56.4	57.4	57.8	57.1
85 Percentile (all)	60.5	62.5	62.5	62.3
Trucks:				
Less than 5000 lbs.	55.2	56.4	57.5	55.6
5000 lbs. or more	53.4	55.4	56.2	53.6



APPENDIX A

Speed Data (Tables 1 to 11)



Location 3.3 miles south of Junction of SK 18	rface Portland Cement Concrete Weather Clear	Last Previous Observation (Speed Report No.94)* Date 8/27/75 Time 11:40 - 1:55 PM
Station 1 Highway I-69	No. of Lanes 4 Type of Surface	This Observation Date 3/23/76 Time 2:22 - 4:37 PM

			P,	PASSENGER	ER CARS					TRUCKS	KS		
		A1	1	Ind	Indiana	Non-Indiana	ndiana	A1		<5000	lbs.	> 5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVAT ION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles obs.	288	322	174	215	114	107	112	103	28	52	84	51
	e. speed (m.p.	58.59	57.44	58.75	57.28	58.35	57.75	57.77	56,64	56.64	55.94	58.14	57.35
	ndard dev	4.480	4.294	4.685	4.540	4.156	3.752	4.364	4.627	4.030	3.632	4.429	5.403
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Э.	1 44 m.p.h.	0.0	0.31	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[2	49	1.39	2.17	1.15	2.79	1.75	0.93	2.68	3.88	3.57	1.92	2.38	5.88
ţΨ	16 S4 m.p.h.	16.67	22.67	16.67	23.72	16.67	20.56	20.54	33.98	32,14	36.54	16,67	31.37
[ə/	59	60.07	72.67	58.62	74.88	62.28	68,22	67,86	74.76	82,14	84.62	63.10	64.71
1		92.01	95.65	90.23	95.81	94.74	95,33	93,75	94,17	100.0	100.0	91.67	88.24
π	69	98.26	99.07	97.70	99.07	99,12	99,07	99,11	99.03	100.0	100.0	98.81	98.04
A	97	99.65	99.38	99.43	99.07	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79	100.0	69.66	100.0	99.53	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
рu	No. of vehicles obs.	141	156	88	104	53	52	56	55	12	30		25
В	Average speed	59.16	59.21	59.15	59.28	59.17	59.06	58.23	58.62	56.92	56.77	58.59	60.84
рt		147	166	98	111	61	55	56	48	16	22	04	26
Вп	Average speed	58.05	55.78	58.34	55.41	57.64	56.51	57.30	54.38	56.44	54.82	57.65	54.00
	N. C.												



TABLE 2 SPEED DATA

	Station 2 Highway	y I-65		Lo	Location	1.0 miles	les west	of	Junction o	of SR 334			
	Lanes 4	Type of	Surfac	ace Por	Portland C	Cement Co	Concrete		We	Weather 1	Hazy (dry)	.y)	
	This Observation					Last Po		\sim	Observation	n (Speed	ed Report	ort No.	(
	11:07	25 PM	5	f		Ē	Time 10:00	00 - 2:	55 PM		!		
			PA	ASSENGER	ER CARS	100				TRUCKS	CKS		
		A11			Indiana	Non-II	ndiana	A1		<5000	lbs.	>5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles obs.	296	339	165	266	131	73	131	108	31	56	100	52
	e. speed (m.p.	60.80	57.65	60.42	57.47	61.27	58.27	59.70	56.47	58,68	56.93	60.02	55.98
	Standard deviation	4.680	5.168	4.580	5.233	4.778	4.908	4.736	4.833	4.874	5.073	4.671	4.557
	1 24 m.p.h.	0 0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
	59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
S	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 [44	0,34	0.29	0.0	0.38	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[]	8	2.03	4.72	3.03	5.64	0.76	1.37	1.53	6.48	3.23	5.36		69
ŢЧ	le at	7.77	29.79	7.88	31.20	7.63	24,66	12.98	36.11	16.13	32.14	12.00	٣)
əΛ	5 S	36.49	63.72	39.39	65.04	32.82	58.90	47.33	70.37	54.84	69.64	45.00	71.15
1	u u	80.74	92.04	83.64	92.48	77.10	90.41	86.26	96.30	90.32	92.86	85.00	100.0
1 [11	96.62	97.94	96.36	97.74	96.95	98.63	96.95	99.07	96.77	98.21	97.00	100.0
A	74 5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	4h 84 m	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
pu	No. of vehicles obs.	148	158	90	121	58	37	57	09	8		65	27
Я	Average speed	60.58	59.08	60.28	58.65	61.05	94.09	59.89	58,37	57.62	58.39	60.27	58.33
hr	-	148	181	75	145	73	36	74	48	23	- 1	51	25
Bı	Average speed	61,02	56,40	09.09	56.49	61.45	56.03	59,55	54.10	59.04	54.83	59.78	53.44



TABLE 3 SPEED DATA

	Station 6 Highway No. of Lanes 4 Typ	ay us 30 Type of	Surf	ace Asp	Location Asphalt Co	on 2.0 miles	les east	of	Junction of	on of SR 49 Weather Cloudy	Loudy		
	This Observation Date 3/18/76 Time 10:55 - 2:	PM		1 1		Last Pr Da Ti	Previous C Date 9/17/ Time 10:46	0bs 7/75 46 -	ervation	(Speed	ed Report	rt No.95	95
			P/	PASSENGER	ER CARS					TRUCKS	KS		
		A11		Ind	Indiana	Non-Ir	Indiana	A1		<5000	lbs.	> 5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles obs.	287	312	197	234	90	78	134	111	32	09	102	51
	. speed	58.65	58.22	58.36	58.04	59.08	58.76	58.01	57.02	57.50	57.58	58.18	56.35
	Pu	4.624	4.389	4.979	464.4	3.721	4.039	4.814	4.967	6.520	5.146	4.166	4.711
	1 24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	39	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	3.13	0.0	0.0	0.0
] G	44 m.p.h.	0.35	0.0	0,51	0.0	0.0	0.0	1.49	0.0	6.25	0.0	0.0	- In
Э.	49	3.83	2.56	5.08	2.99	1.11	1.28	5.97	긺	oo l	3,33	4.90	11./b
ŢЧ		16.03	19.23	18,78	20.09	10.00	16.67	20.15	29.73	28.13	31,67		Ch.12
٩Ņ	59	58.54	62.82	60.41	66.24	54.44	52.56	58.21	72.97	56.25	68,33	58.82	78.43
1	n 64	89.90	93.59	88.83	93.59	92.22	93,59	92.54	92.79	87.50	90.06	94.12	96.08
II	m 69	99.30	99.68	69.66	99.57	98.89	100.0	100.0	98.20	100.0	96.67	100.0	100.0
A	74	99.62	100.0	65.66	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100.0	100.0
	79 m	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	L ЦЗ	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 т.р.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
рu	No. of vehicles obs.	142	153	83	115	59	38	7.5	58	18	32	57	26
B	Average speed	58.73	58.80	58.51	58.62	59.05	59.37	57.92	57.95	57.39	58.97	58,09	56.69
pι	No. of vehicles obs.	145	159	114	119	31	40	+	53	14	28	- 1	25
Bı	Average speed	58.57	57.66	58.42	57.49	59.13	58.17	58,14	56.00	67.64	26.00	58.29	56.00



TABLE 4 SPEED DATA

	tion 8 Highw	U.S.	52			1.0 miles	es west	of	Klondike		1		
	This Observation This Date 3/26/76 Time 8:53-1:	Type of	Surface		Asphalt Co	Concrete Last Pr	Previous Date 8/21 Time 9:00		PM PM	(Spe	Rep	Cloudy	76
			P.	PASSENGER	ER CARŞ	10				TRUCKS	CKS		
		A11		Ind	Indiana	Non-II	Indiana	Al		<5000	lbs.	>5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles obs.	287	368	236	349	51	19	132	113	79	63	53	50
	spee	56.22	57.49	56.06	57.45	56.92	58.16	54.54	55.07	56.28	56.37	51.94	53.44
		5.548	5.482	5.593	5.467	5.329	5.862	7.638	9.99	6.708	7.285	8.247	5.463
	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-	- 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	34	0.0	0.0	0.0	0.0	0.0	0.0	1.52	1.77	0.0	3.17	3.77	0.0
S	[0.70	0.0	0.85	0.0	0.0	0.0		1.77	0.0	3.17	9.43	0.0
] e	10	1.74	1.09	2.12	1.15	0.0	0.0	14/11	_	2.53		0 1	
ΣŢ	4	11.15	6.52	11.44	6.59	9.80	5.26	22.73	15.93	16.46	15.87		
Ч	24	36.59	29.08	36.86	29.23	35.29	26.32	49.24	46.02	40.51	38.10	62.26	
ěΛ	59	74.91		76.27	66.19	68.63	63.16	78.79	75.22	75.95	65.08	~ 1	00
Ţ	1	93.97	90.49	93.22	91.12	96.08	78.95	91.67	91.15	88.61	85.71	96.23	98.00
T	69	99.30	98.10	99.58	98.28	98.04	94.74	96.21	100.0	94.94	100.0	98.11	100.0
V	n 74	99.65	0.1	99.58	100.0	100.0	100.0	99.24	100.0	98.73	100.0	100.0	100.0
	ra ra	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
] []	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 ш.р.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
pug	>	147	205	120	195	27	10	56	99	37	31	19	25
		58.01	58.62	57,75	58.57	59,15	59,70	57,20	56,50	57.89	58.03	55.84	54.60
рu	>	140	163	116	154	24	6	9/	57	42	32	34	25
B	Average speed	54.34	56.06	54,32	56.03	54.42	56.44	52.58	53.67	54.86	54,75	49.76	52,28



TABLE 5 SPEED DATA

	Station 9 Highway	ay U.S.	. 35 Surface		Location Asphalt Co	Oncrete	les east	Jo	Junction of	I-69	Clear		
	This Observation		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	F	1		Previous Date 8/2		Observation 75	(Spe	ed Report	ort No.	(76
	Time 10:40 - 1:40	MG 0+		1 1		F	121	7	:20 PM		1		
			/d	PASSENGER	ER CARȘ					TRUCKS	CKS		
		A11		Ind	ndiana	Non-II	Indiana	Al	1	<5000	lbs.	>5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	of vehi	287	310	257	270	30	70	123	126	94	76	59	50
	speed	56.97	56.05	57,05	56,06	56.20	56.00	56.22	53,66	56.42	54.54	56.00	52,32
		5 843	5.466	5.861	5.398	5.732	5.979	5.427	5,533	5.474	5.639	5.414	5.137
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	- 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	20	0.0	0.32	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ţ	10	2,44	1.29	2.33	0.74	3,33	5.00	1.63	7.94	1.56	6.58	1.69	10.0
J C	4	5.57	8,71	5.84	8.15	3,33	12.50	9.76	18.25	9.38	14.47	10.17	24.0
Ч	54	35,19	37.74	33.46	37,78	50.00		34.96	55.56	29.69	48.68	40.68	0.99
PΛ	23	73.17	80.97	72.76	81.48	76.67	77.50	78.86	87,30	85.94	84.21	71.19	92.0
Ţ	D.E.	91.29	93.23	0.	3	0	2	•			96.05	93.22	100.0
I	d.m. 60	96.86	97.42	96.89	97,41	96.67	97.50	98.37	99.21	96.88	98.68	100.0	100.0
7	74 m.p	99.65	99,35	99.61	99,26	100.0	100.0	99.19	100.0	98.44	100.0	100.0	100.0
	l Is	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	13 84 m	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 ш.р.ћ.	100,0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
pu8	No. of vehicles obs.	140	152	125	127	15	25	69	69	40	44	29	25
E	Average	55,50	57.29	55.76	57.18	53,33	57.84	55,78	55.04	55,87	56,41	55.66	52.64
рu	-	147	158	132	143	15	15	54	57	24	32	30	25
B	Average speed	58,36	54.85	58.28	55.06	59.07	52.93	56.78	51.98	57.33	51.97	56,33	52.00



TABLE 6 SPEED DATA

	Station 12_No. of Lanes	2 Observati	Highway S.R. Type of	25 Surface		Location Asphalt Co	0.7 m ncrete	wes		Mea Wearobservation	ther (Spe	Hazy ed Report	ort No.94_	94_)
		Date 2/19/76 Time 11:00 - 1s	1:40 PM		1 1		Ä	Date 8/21, Time 2:00	75	:10 PM				
				P,	PASSENGER	ER CARŞ					TRUCKS	CKS		
			A1	-	Ind	Indiana	Non-In	Indiana	Al		<5000	lbs.	>5000	lbs.
				Pres-		Pres-		Pres-		Pres.		Pres-		Pres-
	OBSERVATION	ATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles	icles obs.	288	319	266	305	22	14	124	126	69	92	55	50
	6	(m.p.h.)	57.30	56.66	57.25	56.70	57.91	55.79	55.72	55.25	57.14	55.80	53.93	54.40
	Standard d	P P-1	4.475	4.740	4.492	4.802	4.30R	3,118	5.376	4.754	5.342	5.004	4.902	4.257
		24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5 S	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			0.0	0.31	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	<u></u> .	39 т.р.h.	0.35	0.31	0.38	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
] e	10	44 m.p.h.	0.69	0.94	0.75	0.98	0.0	0.0	1.61	0.79	1.45	1.32	1.82	0.0
2) ;	49 m.p.h.	2.43	3.13	2.63	3,28	0.0	0.0	11.29	11.11	7.25	9.21	16.36	14.00
ŗЧ	l e		25.69	34.17	26.32	34,43	18.18	28.57	39.52	48,41	27.54	42.11	54.55	58.00
9 V	8		73.26	78.68	73.31	78.36	72.73	85.71	75.00	83,33	66.67	80.26	85.45	88.00
	u		93.06	95.61	93.61	95.41	86,36	100.0	95,16	96.83	92.75	96.05	98.18	98.00
II	ŗŢ	69 m.p.h.	99.65	98.75	99.62	98.69	100.0	100.0	99.19	99.21	98.55	98.68	100.0	100,0
A	u AG	74 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100,0
	ц. ц.	84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		89 ш.р.ћ.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
рu	No. of veh	vehicles obs.	145	174	134	165	11	6	57	58	29	33	28	25
B	Average sp	speed	57,25	56.45	57.37	56.48	55.82	55.89	57.04	56.43	58.34	56.88	55.68	55.84
рu	No. of	vehicles obs.	143	145	132	140	11	5	67	89	40	43	27	25
Bı	Average	speed	57,36	56.90	57.14	56.95	60.00	55.60	54.60	54.24	56,27	54.98	52.11	52.96



TABLE 7 SPEED DATA

	Station 14 Highway	ay I-65		Lo	Location	East of	f White	River					
	No. of Lanes 4	Type of	Surfa	ace Poi	Portland C	Cement Co	Concrete		We	Weather	Pt. Sunny	ly.	
	This Observation					Last Py Da	io	~	rvatio	Observation (Speed	ed Report	ort No.	94)
		12:53 PM		1 1		í	Time 1	1 1	12:35 PM		1		
			P,	PASSENGER	ER CARŞ	10-				TRUCKS	CKS		
		A1		Dul	Indiana	Non-I	Indiana	A1	1	<5000	lbs.	> 5000	lbs.
			Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vehicles obs.	390	373	369	342	21	31	111	87	54	35	57	52
	speed	59.25	57.21	59.20	57.18	60.14	57.52	57.37	55.40	1	56.97	57.07	54.35
	Standard deviation	91	4.164	4.929	4.187	4.683	3,957	5.452	4.644	5.351	4.409	5.577	4.537
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	- 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	Ì	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9
] 6	0 44 m.p.h.	0.26	0.0	0.27	0.0	0.0	0.0	06.0	1.15	1.85	0.0	0.0	1.92
D I		1.79	1.61	1.90	1.75	0.0	0.0	0.31	11.49	3.70	2.86	8.77	17.31
Ч	16 m.p.h.	14.87	25.47	15.18	25.15	9.52	29.03	27.93	33,33	24.07	22.86	31.58	40.38
ЭΛ	8	55.64	72.39	56.37	72.81	42.86	67.74	66.67	86.21	64.81	74.29	68.42	94.23
1	u	87.44	96.78	87.80	64.96	80.95	100.0	90.99	97.70	90.74	94.29	91.23	100.0
1		97.95	99.20	97.83	99.12	100.0	100.0	98.20	100.0	98.15	100.0	98,25	100.0
V	L u	99.23	99.73	99.19	99.71	100.0	100.0	98.20	100.0	98.15	100.0	98.25	100.0
	La La	99.49	100.0	94.66	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
] []	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
pu	No. of vehicles obs.	182	197	171	183	11	14	55	49	24	23	31	26
B	Average speed	59.24	57,75	59.20	57.72	59.73	58.07	57.02	55.55	58.13	57.13	56.16	54.15
рu	No. of vehicles obs.	208	176	198	159	10	17	56	38	30	1.2	26	26
B	Average speed	59,27	56,61	59.20	56.56	09.09	57.06	57,71	55,21	57.33	56,67	58.15	54.54



				P.	ASSENG	ASSENGER CARŞ					TRUCKS	CKS		
			A11	eri.	Ind	Indiana	Non-Ir	Non-Indiana	A11	1	<5000	lbs.	>5000	lbs.
				Pres-		Pres-		Pres-		Pres-		Pres-		Pres-
	OBSER	OBSERVATION	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent	Last	ent
	No. of vel	vehicles obs.	1155	661	672	481	483	180	895	211	162	108	306	103
	Ave. speed	d (m.p.h.)	59,94	57.54	59,73	57,39	60.23	57,96	58.89	56.55	58.17	56.45	59.27	56.66
	Standard	deviation	4.821	4.760	4.827	4.931	4.802	4,254	4,606	4.723	4,591	955.5	4.575	5.017
		24 m.p.h.	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SS	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	əj	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S		39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
] 6	10	44 m.p.h.	0.09	0.30	0.0	0.42	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C		49 m.p.h.	1,30	3.48	1.49	4.37	1.04	1.11	1.92	5.21	3.09	3.70	1,31	6.80
Ч	16	54 m.p.h.	11.34	26.32	12.20	27.86	10,14	22.22	15.60	35.07	18.52	34.26	14.05	35.92
97		59 m.p.h.	47.19	68.08	49,55	44.69	43.89	64.44	56.84	72.51	64.20	76,85	52.94	67.96
.]	uj	64 m.p.h.	84.59	93.80	86.16	93.97	82.40	93,33	88.68	95.26	91,36	96.30	87.25	94.17
I		69 ш.р.h.	76.96	98.49	96.88	98.34	97.10	98.89	98.29	99.05	98.77	66.07	98.04	99.03
A	9 /	74 m.p.h.	99.39	99.70	99.26	99.58	99.59	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0	79 m.p.h.	16.66	99.85	99.85	99.79	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		84 m.p.h.	16.66	100.0	99.85	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		89 m.p.h.	100.0	100.0	100.0	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



TABLE 9 SPEED DATA

1	ı				. 8.	es-	t		91	278				0)5	86	58	17	03	100.0	0.0	0.0	100.0	100.0
		No. 94			0 1b	Pre	ent	101	54.	5	0.0	0.0	0.0	0	4.9	13.	41	83	97.		100	100		
		Report N			>500		Last	304	55.87	6.425	0.0	0.0	0.99	2.63	5.26	13.82	35,53	70.39	94.74	98.68	100.0	100.0	100.0	100.0
				CKS	lbs.	Pres-	ent	123	56.96	6.337	0.0	0.0	1,63	1.63	1.63	9.76	34.96	66.67	87.80	98.37	100.0	100.0	100.0	100.0
	Weather	(Speed		TRUCKS	<5000		Last	186	56.37	6.687	0.0	0.0	0.0	2.15	4.30	13.98	38.17	68.82	90.32	97.31	99.46	100.0	100.0	100.0
suc	Wea	Observation				Pres-	ent	224	56.04	5.959	0.0	0.0	0.89	0.89	3,13	11.61	37.95	74.11	91.96	99.11	100.0	100.00	100.00	100.0
l stations					A11		Last	490	56.06	6.523	0.0	0.0	0.61	2.45	4.90	13.88	36.53	69,30	93.06	98.16	99.80	100.00	100.00	100.0
individual		Previous Date	me		diana	Pres-	ent	97	58,64	4,426	0.0	0,0	0.0	0.0	0.0	2.06	18.56	54.64	90.72	98.97	100.001	100.001	100.0	100.0
See in		ast	Ţ		Non-Ind		Last	256	58.07	5,067	0.0	0.0	0.0	0.39	1.17	4.30	23.44	61.72	89,84	98.83	100.0	100.0	100.00	100.0
Location		1		ER CARŞ	ana	Pres-	ent	583	57,69	5,103	0.0	0.0	0.0	0.0	0.69	5.15	25.56	66.21	92.11	98.80	100.0	100.0	100.00	100.00
	ace		1 1	PASSENGER	Indi		Last	887	57,55	5,609	0.00	0.0	0.0	0.23	1.47	7.10	25.82		91.54	98.42	99.55	99.77	99.89	99.89
, rural	Surfac			P/		Pres-	ent	680	57,82	5,020		0.0	0.0	0.0	0.59	4.71	24.56	64.56	91.91	98.82	100.0	100.0	100.0	100.0
/ 4-lane	Type of				A11		Last	1143	57.66	5.494		0.0	0.0		1.40	6.47	8	65.27	91.16	51	99.65	99.83	16.66	99.91
Highway 4-lane, rural	T	tion																						
	S	Observation Date	Time				TION	cles obs	(m.p.h.)	deviation	4 m.p.h.		4 m.p.h.	9 m.р.h.	4 m.p.h.	9 m.р.h.	4 m.p.h.	9 m.p.h.	4 m.p.h.		4 m.p.h.	9 m.p.h.	4 m.p.h.	9 m.p.h.
Station 6,8	No. of Lanes	This					OBSERVATION	No. of vehicles	ed	Standard dev			34	[10	sa] e	z i	ц:	11	n Ve	L	L 47	89
														S] e	וכ	ŗЧ	əΛ		II	A			



TABLE 10 SPEED DATA

(76			lbs.	Pres-	ent	100	53.36	4.808	0.0	0.0	0.0	0.0	5.00	19.00	62.00	90.00	99.00	100.0	100.0	100.0	100.0	100.0
- N			> 5000		Last	236	56.22	5.931	0.0	0.0	0.0	0.0	2.12	44.	39.41	70.34	2	98.73	100.0	100.0	100.0	100.0
Renort		:KS	lbs.	Pres-	ent	152	55.17	5.351	0.0	0.0	0.0	0.0	3.95	11.84	45.39	82.24	96.05	98.68	100.0	100.0	100.0	100.0
Weather	1 1	TRUCKS	<5000		Last	240	57.52	6.257	0.0	0.0	0.0	0.42	1.67	10.42	25.83	68.75	90.83	96.25	98.33	99.58	100.0	100.0
4-				Pres-	ent	252	54.45	5.209	0.0	0.0	0.0	0.0	4.37	14.68	51.98	85.32	97.22	99.21	100.0	100.0	100.0	100.0
w	1 1		A11		Last	925	56,88	6.125	0.0	0.0	0.0	0.21	1.89	10.92	32.56	69.54	90.76	97.48	99.16	99.79	100.0	100.0
individual	Date Time		Indiana	Pres-	ent	54	55.94	5,357	0.0	0	0.0	0.0	3,70	9.26	35.19	79.63	94.44	98.15	100.0	100.0	100.0	100.0
See inc			Non-Ir		Last	121	57.42	5,006	0.0	0.0	0.0	0.0	0.83	2.48	31.40	73.55	90.91	69.96	100.0	100.0	100.0	100.0
Location	•	R CARS	iana	Pres-	ent	575	56.39	5,096	0.0	0.0	0.17	0.35	0.87	5.57	36.00	79.83	90.43	98.09	99,65	100.0	100.0	100.0
ا		PASSENGER	Indi	PROCESS AND	Last	1019	57.80	5.512	0	0.0	0.0	0.20	1.18	5.00	26.89	66.14	90.06	98.04	99.51	99.90	100.0	100.0
Surfac		P/		Pres-	ent	629	56.36	5,116	0.0	0.0	0.16	0.32	1.11	5.88	35.93	79.81	94.46	98.09	89.66	100.0	100.0	100.0
Highway 2-lane, rural Type of Surfac			A11		Last	1140	57.76	5.460	0.0	0.0	0.0	0.18	1.14	4.74	27.37	66.93	90.18	97.89	99.56	99.91	100.0	100.0
lighwa) - T)																						
Hi Hi						obs.	p.h.)	lon). h.	m.p.h.	m.р.h.	m.p.h.	m.p.h.	o.h.	m.p.h.	m.p.h.	m.p.h.	m.p.h.	m.p.h.	m.p.h.	m.p.h.	m.p.h.
les les					OBSERVATION	of vehicles	E)	deviation		29 m.						59 m.j		69 m.j				89 ш.
Station 9,12 No. of Lanes					OBSER	No. of vel	Ave. speed	Standard		SS	; ə ː		JC] e	j c	u ų	ΥĒ	ÐΛ	. g . o	17 17 8	
							7	127				S	3 [2	ŗЧ	əΛ		II	A			



TABLE 11 SPEED DATA

	1	No.94_)			lbs.	Pres-	ent	356	54.90	5,109	0,0	0.0	0.0	0.0	3.09	13.76	45.51	- 2	97.19	99.72	100,0	100,0	100,0	100.0
					>5000		Last	989	57.42	5.735	0.0	0.0	0.30	0.81	2.12	7.89	27,20	62.18	91,10	98.58	99.90	100.0	100.0	100.0
		ed Report		CKS	lbs.	Pres-	ent	418	56.18	5,422	0.0	0.0	0.48	0,48	1.91	8.37	37,56	75.60	93.54	98.80	100.0	100.0	100,0	100.0
	Weather	n (Speed		TRUCKS	<5000		Last	665	57,47	5.927	0.0	0.0	0.0	0.75	1,95	8,72	26,47	66,17	90.98	97.44	99,10	99,85	100,0	100.0
ons	We	Observation				Pres-	ent	774	55,59	5.315	0.0	0.0	0.26	026	2,45	10,85	41.21	78.68	95.22	99.22	100,0	100,0	100.0	100.0
1 stations					A1		Last	1654	57,44	5,809	0.0	0.0	0.18	0,79	2.06	8,22	26.90	63,78	91.05	98.13	99.58	96.66	100.0	100.0
individual		Previous Date	Time		Non-Indiana	Pres-	ent	362	57,80	4,519	0.0	0.0	0.0	0.0	0.55	2.49	23.76	64,36	93.37	98.90	100.0	100.0	100.0	100.0
See in		Last Pr	Ţ		Non-Ir		Last	1021	59,46	4.922	0.0	0.0	0.0	0.10	0.49	1,86	15.08	50.15	85.01	97.75	99,80	100.0	100.0	100.0
Location		-		ER CARS	Indiana	Pres-	ent	1981	57,15	4,936	0.0	0.0	0.05	0.10	0.56	4.49	29.08	72.08	93.99	98.54	99.75	99.95	100.0	100.0
	e		1 1	PASSENGER	Indi		Last	3119	58,48	417			0.0	0.13	0.87	4.33	21.03	59.86	88.84	97.76	98.36	. 78	96.66	76.66
a syste	Surface			P/		Pres-	ent	2343	2	878			,†		0.55		28.25	70.89	93.90	98.59	99.79	96.66	100.0	100.0
Highway Indiana system	Type of				A11		Last	4140	58.72	5, 15	0			0.12			19.57	57.46	87.90	97.75	74.66		99.95	96.98
lighway	T																							
		Observation Date	(a)					obs.	.h.)	ion	m.p.h.	т.р.ћ.	m.p.h.	m.p.h.										
1-14	nes		Time				OBSERVATION	of vehicles	d (m.p.h.	deviation	24 m.	1		!	44 m.		i .		64 ш.	.ш 69			i	89 m.
Station 1-14	of Lanes	This					OBSER	l	. spee	Standard		SS	; ə ·	Ţ	ıc		j e			l i	ÐΛ	191 19.		
Sta	No.							No.	Ave.	Sta				S	91	Э.	ŗų	ЭΛ		II	Ą			



APPENDIX B

Speed Data Summary as Furnished FHWA For Quarterly Speed Monitoring (Tables 12 to 19)



TABLE 12

Monitoring of Speed (Statistical Summary)

(Statistical Summary)

[X] Quarterly Report--Calendar Quarter Ending March 31, 1976

Annual Report--Year Ending

*Mileage not yet reduced by mileage with less than 55 mph limit

STATE Indiana

8	.5 H	m	5		1	20	1 1
eedin	65 MPH		,			4	'
Percent of Motorists Exceeding	60 MPH	18	23	27	1	15	1
Motor	55 MPH	65	65	99	1	51	1
85th Percentile	Speed (NPH)	9.09	61.5	61.9	1	59.9	1
Median	Speed (NTH)	56.3	56.7	56.9	1	55.2	1
Average	Speed (MPH)	56.9	57.3	57.4	-	55.8	1
Duration of Measurement	Session (Hours)	2 hours each site	2 hours each site	2 hours each site	l I	2 hours each site	14 hours
Number	Vehicles Measured	460	372	904		881	3117
Numb er of	Monitor Locations	-	2	2	1	2	7
Miles*		223	849	683	!	8791	10551
		Interstate Urban	Interstate Rural	Multi-lane, Divided	!fulti~lane, Undivided	2-Lane, Rural	State Total



HIGHWAY CATEGORY Interstate, Urban	Interstate, Urban
STATION NUMBER 14	LOCATION I-65 (East of White River)
NUMBER OF SESSIONS 1 DATES3/19/76	DATES3/19/76 VEHICLES MEASURED 460
AVERAGE SPEED (MPH)	56.9 STANDARD DEVIATION (MPH) 4.3
MEDIAN SPEED (MPH)	56.3 85TH PERCENTILE SPEED (MPH) 60.6
PERCENTAGE OF VEHICLES EXCEEDING:	LES EXCEEDING:

65 MPH:

8

60 MPH:



TABLE 14

SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Interstate, Rural	
STATION NUMBER 1	LOCATION I-69 (3.3 miles south of Junction of SR 18)	18)
NUMBER OF SESSIONS 1 DATES 3/23/76	DATES 3/23/76 VEHICLES MEASURED 425	
AVERAGE SPEED (MPH) 57.2	57.2 STANDARD DEVIATION (MPH) 4.4	
MEDIAN SPEED (MPH) 56.6	56.6 85TH PERCENTILE SPEED (MPH) 60.2	
PERCENTAGE OF VEHICLES EXCEEDING:	LES EXCEEDING:	

65 MPH:

60 MPH: 19



TABLE 15

SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Interstate, Rural	
STATION NUMBER 2	LOCATION I-65 (1.0 mile west of Junction of SR 334)	34)
NUMBER OF SESSIONS 1 DATES 2/10/76	1 DATES 2/10/76 VEHICLES MEASURED 447	
AVERAGE SPEED (MPH)	57.4 STANDARD DEVIATION (MPH) 5.1	
MEDIAN SPEED (MPH) 56.9	85TH PERCENTILE SPEED (MPH) 62.1	
PERCENTAGE OF VEHIC	VEHICLES EXCEEDING:	
55 MPH: 63	60 MPH: 26 65 MPH: 6	



TABLE 16

HIGHWAY CATEGORY Multi-lane, Divided (Rural)	ulti-lane,	Divided	(Rural)			
STATION NUMBER 6	LOCATI	ON U.S.	6 LOCATION U.S. 30 (2.0 miles east of Junction of SR 49	Junction	of SF	۲ 49
NUMBER OF SESSIONS 1 DATES 3/18/76	DATES	3/18/76	VEHICLES MEASURED 423	ED 423		
AVERAGE SPEED (MPH) 57.9	57.9	STANI	STANDARD DEVIATION (MPH) 4.6	4.6		
MEDIAN SPEED (MPH) 57.4	57.4	85ТН РЕ	85TH PERCENTILE SPEED (MPH) 61.8	H) 61.8		
PERCENTAGE OF VEHIC	VEHICLES EXCEEDING:	EDING:				

2

65 MPH:

60 MPH: 29

73



TABLE 17

HIGHWAY CATEGORY Multi-lane, Divided (Rural)	e, Divided (Rural)
STATION NUMBER 8 LOCAT	STATION NUMBER 8 LOCATION U.S. 52 (1.0 mile west of Klondike)
NUMBER OF SESSIONS 1 DATES 3/26/76	3/26/76 VEHICLES MEASURED 481
AVERAGE SPEED (MPH) 56.9	STANDARD DEVIATION (MPH) 5.9
MEDIAN SPEED (MPH) 56.4	85TH PERCENTILE SPEED (MPH) 62.1
PERCENTAGE OF VEHICLES EXCEEDING:	EDING:

ω

65 MPH:

60 MPH: 26



TABLE 18

HIGHWAY CATEGORY IWO-	Two-lane, Rural
STATION NUMBER 9	LOCATION U.S. 35 (1.5 miles east of Junction of I-69)
NUMBER OF SESSIONS 1 DATES 3/23/76	DATES 3/23/76 VEHICLES MEASURED 436
AVERAGE SPEED (MPH)	55.4 STANDARD DEVIATION (MPH) 5.6
MEDIAN SPEED (MPH) 54	54.7 85TH PERCENTILE SPEED (MPH) 59.7
PERCENTAGE OF VEHICLES EXCEEDING:	ES EXCEEDING:

4

65 MPH:

60 MPH: 14

47



TABLE 19

HIGHWAY CATEGORY Two-lane, Rural	wo-lane, F	Rural	
STATION NUMBER 12		ON S.R.	LOCATION S.R. 25 (0.7 miles west of Americus)
NUMBER OF SESSIONS 1 DATES 2/19/76	DATES	2/19/76	VEHICLES MEASURED 445
AVERAGE SPEED (MPH) 56.2	56.2	STANDA	STANDARD DEVIATION (MPH) 4.8
MEDIAN SPEED (MPH) 55.7	55.7	85TH PER(85TH PERCENTILE SPEED (MPH) ^{60.2}
PERCENTAGE OF VEHICLES EXCEEDING:	LES EXCE	EDING:	

4

65 MPH:

15

60 MPH:





